

17. (New) The optical element according to claim 16, wherein a concentration of the fluorine in the layer or layers of silica is not less than 0.1 mol% nor more than 10 mol%.

18. (New) The optical element according to claim 16, wherein said concentration of the fluorine is not less than 1 mol%.

19. (New) The optical element according to claim 16, wherein a refractive index of the layer or layers of silica for F₂ laser light is 1.60 to 1.80.

20. (New) The optical element according to claim 16, wherein said film further comprises a layer of a material selected from the group consisting of MgF₂, LiF, and Na₃AlF₆.

21. (New) The optical element according to claim 16, wherein said element is comprised of fluorite.

22. (New) The optical element according to claim 16, wherein said element is comprised of silica containing fluorine.

23. (New) The optical element according to claim 16, wherein said film is an antireflection coating.